Nightmare Bacteria Prepper's Guide

Summary: "Nightmare bacteria" refers to drug-resistant strains of bacteria that pose a significant threat to public health due to their ability to resist multiple antibiotics. A key player in this resistance is the New Delhi metallo-β-lactamase (NDM) gene, which enables bacteria to break down carbapenems, a class of last-resort antibiotics. Various bacteria, including Escherichia coli and Klebsiella pneumoniae, have been discovered to carry the NDM gene, leading to severe infections that are often untreatable. Research is ongoing to find ways to inhibit the NDM gene, which could restore the effectiveness of existing antibiotics against these resistant strains. This effort is crucial for developing new treatment strategies and combating the rising threat of antibiotic resistance.

Potential NDM gene inhibitors: The following is a list of NPASS compound designations along with the natural sources containing the compound. These compounds were determined by computer models to potentially inhibit the NDM gene.

1. NPC171932: Periploca aphylla
2. NPC100251: Myrica rubra bark
3. NPC18185:
    - Cinnamomum aromaticum (cassia)
    - Nelumbo nucifera (lotus flower, bud & leaves)
    - Pastinaca sativa (parsnips)
    - Vitis vinifera (grape) fruit, leaf & seed
    - Vaccinium oxycoccos fruit (swamp cranberry)
    - Vaccinium vitis-idaea (lingonberry)
4. NPC472454: African Mangosteen
5. NPC98583:
    - Heterotheca inuloides (mexican arnica)
    - Vitis vinifera (grape) fruit, leaf & seed
6. NPC473010: Sophora alopecuroides

Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC7841178/